

Sub E1 cont.
DT
cyanate ester prepolymer, or a mixture of the monomer and prepolymer;

applying an amount of the composition at a thickness sufficient to cover substantially all of the solder joint; and

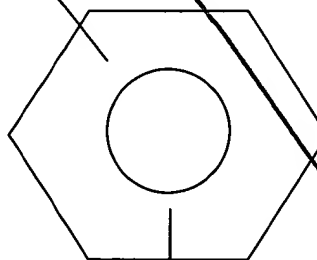
photocuring the composition to reinforce the solder joint, wherein photocuring the composition forms a resin in the composition from the precursor.

14. The method of claim 13, wherein the cyanate ester includes at least two cyanate groups and is curable through cyclotrimerization.

Sub E2
D2
15. (TWICE AMENDED) The method of claim 13, wherein the cyanate ester is selected from the group consisting of compounds depicted by formulas 1 and 2:

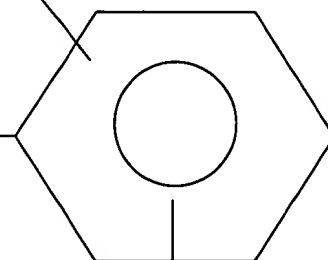
(1)

(NCO)

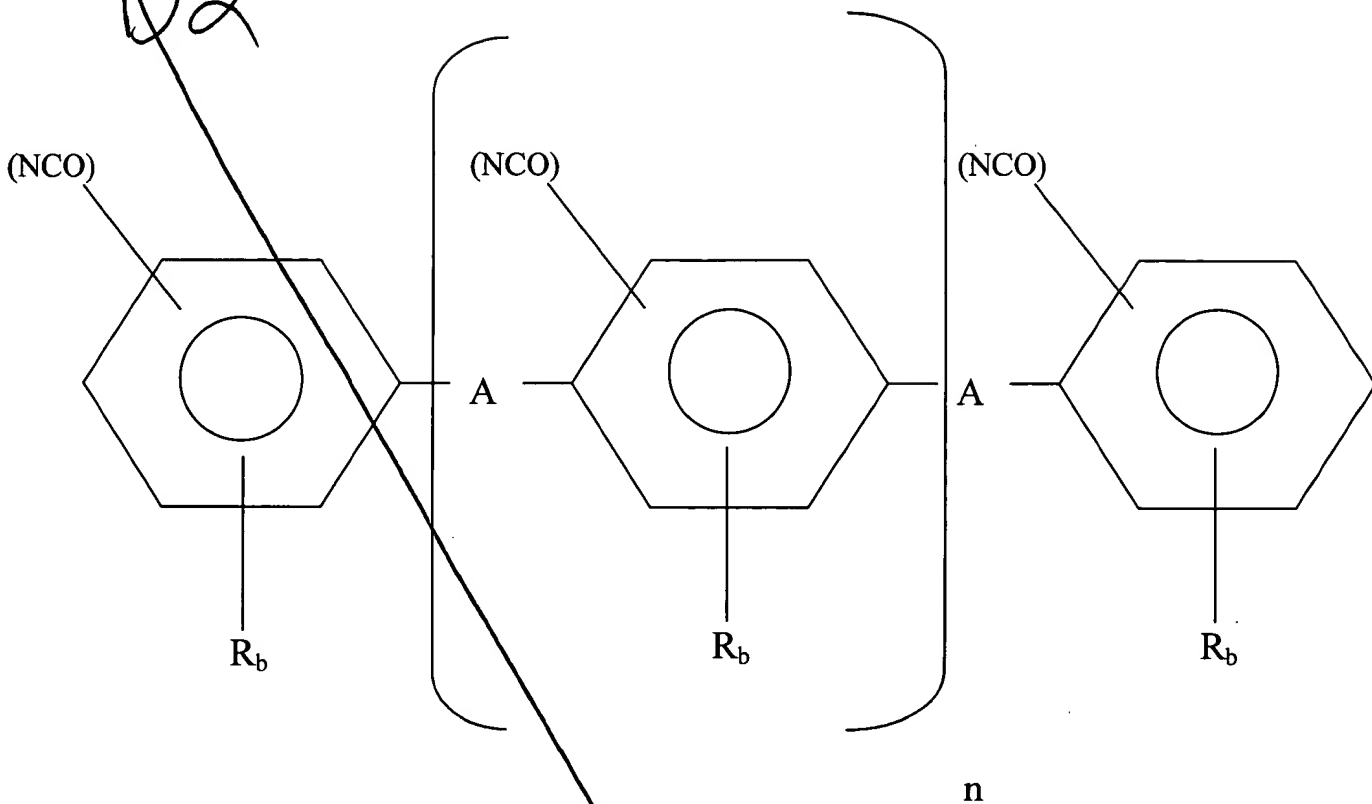


R_b

(NCO)



R_b



wherein each a and b independently include integers from 0 to 3, and at least one a is not 0;

wherein c includes integers from 0 to 1; wherein n includes integers from 0 to 8; wherein each

each R is independently selected from the group consisting of non-interfering alkyl, aryl, alkaryl,

heteroatomic, heterocyclic, carbonyloxy, carboxy, hydrogen, C₁₋₆ alkyl, C₁₋₆ allyl, C₁₋₆ alkoxy,

Sub E2
Cust
D2

halogen, maleimide, propargyl ether, glycidyl ether and combinations thereof; A is selected from the group consisting of C₁₋₁₂ polymethylene, CH₂, dicyclopentadienyl, aralkyl, aryl, cycloaliphatic, CH(CH₃), SO₂, O, C(CF₃)₂, CH₂OCH₂, CH₂SCH₂, CH₂NHCH₂, S, C(=O), OC(=O), OCOO, S(=O), OP(=O), OP(=O)(=O)O, alkylene radicals, C(CH₃)₂, and combinations thereof.

Sub E3
D3

16. (AMENDED) The method of claim 13, wherein the cyanate ester is selected from the group consisting of cyanatobenzene, 1,3-and 1,4-dicyanatobenzene, 2-tert-butyl-1,4-dicyanatobenzene, 2,4-dimethyl-1,3-dicyanatobenzene, 2,5-di-tert-butyl-1,4-dicyanatobenzene, tetramethyl-1,4-dicyanatobenzene, 4-chloro-1,3-dicyanatobenzene, 1,3,5-tricyanatobenzene, 2,2' 4,4'-dicyanobiphenyl, 3,3',5,5'-tetramethyl-4,4'dicyanobiphenyl, 1,3-dicyanatonaphthalene, 1,4-dicyanatonaphthalene, 1,5-dicyanatonaphthalene, 1,6-dicyanatonaphthalene, 1,8-dicyanatonaphthalene, 2,6-dicyanatonaphthalene, 2,7-dicyanatonaphthalene, 1,3,6-tricyanatonaphthalene, bis(4-cyanatophenyl)methane, bis(3-chloro-4-cyanatophenyl)methane, 2,2-bis(4-cyanatophenyl)propane, 2,2-bis(3,5-dichloro-4-cyanatophenyl)propane, 2,2-bis(3,5-dibromo-4-cyanatophenyl)propane, bis(4-cyanatophenyl)ether, bis(p-cyanophenoxyphenoxy)-benzene, di(4-cyanatophenyl)ketone, bis(4-cyanatophenyl)thioether, bis(4-cyanatophenyl)sulfone, tris(4-cyanatophenyl)phosphite, tris(4-cyanatophenyl)phosphate and combinations thereof.

17. The method of claim 13, wherein the photoinitiator is selected from the group

consisting of aryldiazonium, triphenylsulfonium, diphenyliodonium, diaryliodosyl and triarylsulfoxonium salts.

18. The method of claim 13, wherein the composition contains about 40% to about 75% by weight dispersed silica.

Sub E4
DS
19. (TWICE AMENDED) The method of claim 13, wherein the dispersed filler includes fused silica and amorphous silica.

Sub E5
D4
20. (TWICE AMENDED) The method of claim 19, wherein a particle size of the dispersed silica is 31 microns or less.

Sub E6
DS
21. (AMENDED) The method of claim 13, wherein a coefficient of linear thermal expansion of the cured composition is from about 26 to about 39 ppm/degree C.

22. (AMENDED) The method of claim 13, wherein a glass transition temperature of the cured composition is from about 100 to about 160 degrees C.

23. (TWICE AMENDED) The method of claim 13, wherein the composition includes from 1 to 20 parts of surface treating agents selected from the group consisting of vinyltrimethoxysilane, vinyltriethoxysilane, N(2-aminoethyl)3-aminopropylmethyldimethoxysilane, 3-aminopropylethoxysilane, 3-glycidoxypropyltrimethoxysilane, 3-glycidoxypropylmethyl